

REMARKS

The Examiner has rejected claims 1-29 and 42-46. The rejections from the Office Action dated July 8, 2008 are discussed below. Claims 1, 11, 23, and 45 have been amended. New claim 47 has been added. No new matter has been added. Support for the amendments is found throughout the specification. In particular, support for the amendments is found at least at page 9, lines 21-30; page 10, lines 1-2; page 11, lines 17-25; page 14, line 31-page 15, line 2; page 15, lines 22-31; page 16, lines 10-13; page 17, lines 3-7; and Figures 1-7, 13. Reconsideration of the application is respectfully requested in light of the following remarks.

Drawing Objections

Figures 1 and 13 have been rejected under 37 CFR 1.121(d) for containing unclear reference numbers. Replacement sheets for figures 1 and 13 in conformance with 37 CFR 1.121(d) are being filed herewith.

Interview Summary

The Applicants appreciate Examiner Smith granting the undersigned attorneys a telephone interview held on August 11, 2008. During the course of this interview, Applicants' proposed amendments in response to the July 8, 2008 non-final Office Action were discussed. Applicants indicated to Examiner Smith that U.S. Patent No. 3,944,686 to Froberg ("Froberg") does not teach or suggest preheating a reactant gas in a preheater. Examiner Smith agreed that Froberg does not teach preheating the reactant gas in a preheater.

Rejections Under 35 U.S.C. § 102

Claims 1, 3-7, 8, 9, 11, 13-17, 18, 19, 22, 23, 25, 42, and 43 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,944,686 to Froberg ("Froberg"). Independent claim 1, 11 and 23 have been amended to incorporate the feature of placing the porous material into a module. The Examiner has acknowledged that Froberg did not disclose placing material into a module. (July 8, 2008 Office Action at p. 6). Accordingly, amended claims 1, 11, and 23, along

with all those that depend therefrom, are not anticipated by Froberg. Applicants thus request that the rejection be withdrawn.

New independent claim 47 requires that the reactant gas is preheated in a preheater. In view of the August 11, 2008 interview, Examiner Smith agreed that Froberg did not disclose preheating the reactant gas. None of the embodiments of Froberg teach or suggest preheating reactant gas. In fact, Froberg *teaches away* from preheating the reactant gas because Froberg teaches the desirability of the reactant gas to have a cooling effect along the walls of the flow passages 96 as it passes therethrough. Froberg at Col. 4, lines 54-58 and Col. 5, lines 16-19. Froberg teaches that such cooling of the walls prevents the hydrocarbon reactant gas from depositing onto the walls and clogging the flow passages. *Id.* Accordingly, it would not have been obvious for one of ordinary skill in the art to consult the teachings of Froberg to preheat a reactant gas prior to the gas densifying the porous material. Applicants therefore believe newly added claim 47 is in condition for allowance.

Rejections Under 35 U.S.C. § 103

Claims 2, 10, 12, 20, 24, 26-29 and 44-46 stand rejected under 35 U.S.C. § 103(a) as being obvious over Froberg. The Examiner contends that placing porous sheets into a module would have been obvious over Froberg. In particular, notwithstanding the Examiner's admission that Froberg does not teach placing material into a module either before or after densification, the Examiner alleges without any basis or citations that because Froberg teaches cutting the sheets after densification, it would have been obvious to place the cut densified sheets into a module for shipping or storage to avoid damage or loss of the sheets. (July 8, 2008 Office Action at p. 6.) However, there is not even a hint of using such a packaging module in Froberg.

Moreover, even if there were some teaching to place cut, densified sheets into a module for shipping or storage, how would that have led one to place porous materials into a module before loading into a CVI chamber? Presumably, the packaging materials would not survive the densification process. The Examiner's

leap from a packaging module—which packaging module is not even hinted at—to a module used in the densification process is wholly improper.

In fact, Froberg *teaches away* from placing porous sheets into a module prior to densification and could not be accomplished without drastic changes to the Froberg system. In particular, Froberg only discloses a process in which an elongated *continuous* sheet 12 is introduced by feed rolls 14 into a narrow slot 38 formed by an upper perforated guide plate 36 and a lower guide plate 40. Froberg at Col. 3, ll. 27-35, Figures 1 and 9. The apparatus 10 of Froberg is limited to a continuous carbon vapor deposition process. Col. 2, ll. 38-40 and Abstract. Accordingly, without drastic modifications, the apparatus 10 disclosed in Froberg would not be capable of densifying porous sheets which are stacked within a module, as recited in the Applicants' claims. For at least these reasons, Applicants request withdrawal of the § 103 rejection based on Froberg alone.

Claim 21 has been rejected under 35 U.S.C. § 103(a) as obvious over Froberg. in view of JP 408002976 to Sekiya ("Sekiya"). For at least the reasons noted above, Froberg is deficient because it fails to teach each and every element of the claims. The combination of Sekiya with Froberg remains deficient because Sekiya does not disclose nor suggest a CVI process in which porous sheets are placed into a module during densification. Therefore, Applicants request that this rejection is also withdrawn.

CONCLUSION

The present application is now in condition for allowance. If the Examiner has any remaining issues, he is invited to contact the undersigned attorney for the Applicants via telephone to resolve any such issues.

Respectfully submitted,

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